

REMARKS

I. INFORMATION DISCLOSURE STATEMENT

The Applicants thank the Examiner for pointing out the typographical error in line item A2 of the information disclosure statement filed on May 5, 2005. The correct document number is US2002/0184964. The Applicants submit herewith a corrected replacement Information Disclosure Statement and PTO Form 1449 identifying the above referenced document number.

II. DRAWINGS

With regard to the reference numbers of Figure 9, the Applicants submit herewith a replacement Figure 9. Amendments to this Figure are discussed above in the Amendments to the Drawings section.

With regard to Figures 1 and 2, the Applicants respectfully submit that these figures are not Prior Art. These figures are not discussed in the related art section of the pending application, but are explained with respect to the present invention in the detailed description of the pending application and the priority document (UK Patent Application No. 0215767.5). Accordingly, the Applicants respectfully assert that these figures are proper in the current state and are in compliance with 37 C.F.R. § 1.83. Therefore, the Applicants respectfully request the withdrawal of pending objection to Figures 1 and 2.

III. CLAIM OBJECTION – Claim 16

The Applicants respectfully assert that the objection to claim 16 has been obviated by appropriate amendment. Accordingly, the Applicants respectfully request withdrawal of these rejections.

IV. CLAIM REJECTIONS – 35 USC § 112

The Applicants respectfully assert that the rejection of claims 1, 5, 10-14, 15-21 and 24 under 35 USC § 112 have been obviated by appropriate amendment. Accordingly, the Applicants respectfully request withdrawal of these rejections.

V. CLAIM REJECTIONS – 35 USC § 102

(1) Claims 1, 2, and 7-9

Claims 1, 2, and 7-9 are directed towards a loudspeaker diaphragm having an acoustic region. The loudspeaker diaphragm comprises a conical region having an inner and outer surface and a cylindrical region having an inner and outer surface that is radially inward of the conical region. A coating is formed on at least one surface of the conical region and the cylindrical region, where the coating tapers in the conical region and where the coating is a uniform thickness in the cylindrical region.

Great Britain Patent No. 369,992 to Persson ("*Persson*") is directed to an acoustic diaphragm. Figure 4 of *Persson* shows a conically shaped diaphragm. (See p. 2, ll. 85-87). However, *Persson* does not disclose a cylindrical region radially inward of the conical region. The Applicants respectfully assert that the "center edge of the diaphragm," see *Office Action mailed May 2, 2008*, p. 6, ll. 10-11, does not disclose a cylindrical region. The term "cylindrical" suggests depth. The "center edge" identified by the Office Action is just that, an edge – an edge of the conical region. However, this is not a cylindrical region.

Therefore, the Applicants respectfully assert that all of the features of claims 1, 2, and 7-9 are not disclosed by *Persson*. Accordingly, the Applicants respectfully request the withdrawal of these rejections.

(2) Claims 26-28

Claims 26-28 are directed towards a loudspeaker diaphragm. The loudspeaker diaphragm comprises a conical portion and a cylindrical portion. A coating is formed on at least one major surface of at least the conical and

cylindrical portions, where the coating tapers from a maximum value on the conical portion to a minimum value on the cylindrical portion.

Persson is directed to an acoustic diaphragm. Figure 4 of *Persson* shows a conically shaped diaphragm. (See p. 2, ll. 85-87). However, *Persson* does not disclose a cylindrical region radially inward of the conical region. The Applicants respectfully assert that the “center edge of the diaphragm,” see *Office Action mailed May 2, 2008*, p. 6, ll. 10-11, does not disclose a cylindrical region. The term “cylindrical” suggests depth. The “center edge” identified by the Office Action is just that, an edge – an edge of the conical region. However, this is not a cylindrical region.

Therefore, the Applicants respectfully assert that all of the features of claims 26-28 are not disclosed by *Persson*. Accordingly, the Applicants respectfully request the withdrawal of these rejections.

(3) Claims 34-35

Claims 34-35 have been amended to essentially include the feature of previously pending claim 37. Claims 34-35 are directed to a loudspeaker diaphragm. The loudspeaker diaphragm comprises an inner surface and an outer surface. A continuous coating is applied to each of the inner and outer surfaces, and the coating on the inner surface is thicker than the coating on the outer surface at a corresponding location.

U.S. Patent No. 1,715,598 to Hawley et al. (“*Hawley*”) is directed to a metal coated diaphragm. *Hawley* discloses a coating on the inner and outer surfaces. In *Hawley*, the coating on the inner surface is the same thickness as the coating on the outer surface at a corresponding location. See Figures 1 and 2. *Hawley*, however, does not disclose that the coating on the inner surface is thicker than a coating on the outer surface at a corresponding location.

Moreover, nothing in the art of record suggests a loudspeaker diaphragm having a continuous coating on each of an inner surface and outer surface where the coating on the inner surface is thicker than the coating on the outer surface at a corresponding location.

With respect to prior pending claim 37, the Office Action makes a conclusory statement that it would have been obvious to one of ordinary skill in the art to make minor changes to *Hawley* to achieve the claimed feature of an inner surface coating being thicker than an outer surface. However, the Office Action provides no specific reasoning to support this assertion of a design choice. Accordingly, it appears that the rejection is based on the Examiner's personal knowledge. Therefore, the Applicants respectfully request that if a similar rejection is asserted against claims 34-35 that the Examiner provide an affidavit to support the assertion of design choice to which the Applicants may respond. See 37 C.F.R. § 1.104(d)(2) (indicating that when a rejection is based on facts within the personal knowledge of the Examiner, the Applicant may request the Examiner provide a supporting affidavit which shall be subject to contradiction or explanation).

VI. CLAIM REJECTIONS – 35 USC § 103

(1) Claims 3-6, 13, 14

Claims 3-6, 13, and 14 are directed to a loudspeaker diaphragm and depend from claim 1.

The proposed combination of *Persson* and U.S. Patent No. 4,726,443 to Ugaji et al. ("*Ugaji*") is directed to an acoustic diaphragm. As explained above in section V(1), *Persson* fails to disclose all of the features of claim 1. *Ugaji* fails to fill in the gaps of *Persson*. Accordingly, the Applicants respectfully assert that all of the features of claims 3-6, 13 and 14 are not disclosed by the combination of *Persson* and *Ugaji*. Therefore, the Applicants respectfully request the withdrawal of these rejections.

(2) Claim 31

Claim 31 is directed to a loudspeaker diaphragm and depends from claim 26.

The proposed combination of *Persson* and *Ugaji* is directed to an acoustic diaphragm. As explained above in section V(2), *Persson* fails to disclose all of the features of claim 1. *Ugaji* fails to fill in the gaps of *Persson*. Accordingly, the Applicants respectfully assert that all of the features of claim 31 are not disclosed

by the combination of *Persson* and *Ugaji*. Therefore, the Applicants respectfully request the withdrawal of this rejection.

(3) Claims 10-12

Claims 10-12 have been cancelled without prejudice thereby obviating these rejections.

(4) Claims 15-21

Claims 15-21 are directed to a loudspeaker diaphragm. The diaphragm comprises a conical region and a cylindrical region, with a transition region between the conical region and the cylindrical region. A continuous coating is formed on at least one major surface of the conical region, the cylindrical region, and the transition region, where the coating in at least the transition region is tapered.

The proposed combination of U.S. Patent No. 3,125,647 to Rouy ("*Rouy*") in view of *Hawley* is directed to an electric-acoustic transducer with metal coated diaphragm. The diaphragm of this combination does not disclose a conical region and a cylindrical region. Accordingly, the Applicants respectfully assert that all of the features of claim 15-21 are not disclosed by the combination of *Rouy* and *Hawley*. Therefore, the Applicants respectfully request the withdrawal of these claims.

(5) Claims 22-25

Claims 22-25 are directed to a loudspeaker diaphragm and depend from claim 15.

The proposed combination of *Rouy* and *Hawley* is directed to an electric-acoustic transducer with metal coated diaphragm. As explained above in section VI(4), *Rouy* and *Hawley* fail to disclose all of the features of claim 15. Accordingly, the Applicants respectfully assert that all of the features of claim 22-25 are not disclosed by the combination of *Rouy* and *Hawley*. Therefore, the Applicants respectfully request the withdrawal of this rejection.

(6) Claims 29-30

Claims 29-30 are directed to a loudspeaker diaphragm and depend from claim 26.

Persson is directed to an acoustic diaphragm. Figure 4 of *Persson* shows a conically shaped diaphragm. (See p. 2, ll. 85-87). However, *Persson* does not disclose a cylindrical region radially inward of the conical region. The Applicants respectfully assert that the “center edge of the diaphragm,” see *Office Action mailed May 2, 2008*, p. 6, ll. 10-11, does not disclose a cylindrical region. The term “cylindrical” suggests depth. The “center edge” identified by the Office Action is just that, an edge – an edge of the conical region. However, this is not a cylindrical region.

Therefore, the Applicants respectfully assert that all of the features of claims 29-30 are not disclosed by *Persson*. Accordingly, the Applicants respectfully request the withdrawal of these rejections.

(7) Claims 32-33

Claims 32-33 are directed to a loudspeaker and depend from claim 26.

In proposed combination of *Persson* in view of U.S. Patent No. 6,327,372 to Devantier et al. (“*Devantier*”), the Office Action relies on *Persson* to disclose a cylindrical region. However, as explained above, *Persson* only discloses a conical region, but does not disclose a cylindrical region. Accordingly, the Applicants respectfully assert that all of the features of claim 26, and therefore claims 32-33 are not disclosed by the combination of *Persson* and *Devantier*. Therefore, the Applicants respectfully request the withdrawal of these rejections.

(8) Claims 36-37

Claim 36 is directed to a loudspeaker and depends from claim 34.

Hawley is directed to a metal coated diaphragm. *Hawley* discloses a coating on the inner and outer surfaces. In *Hawley*, the coating on the inner surface is the same thickness as the coating on the outer surface at a corresponding location. See Figures 1 and 2. *Hawley*, however, does not disclose that the

coating on the inner surface is thicker than a coating on the outer surface at a corresponding location.

Accordingly, the Applicants respectfully assert that all of the features of claim 36 are not disclosed by *Hawley*.

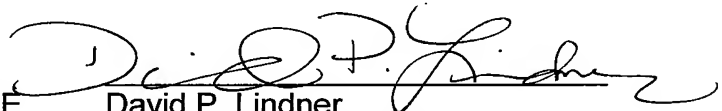
Claim 37 is cancelled without prejudice. Therefore, the Applicants respectfully request the withdrawal of these rejections.

CONCLUSION

The Applicants respectfully submit that all of the pending claims are in condition for allowance and a notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200


David P. Lindner
Registration No. 53,222
Attorney for the Applicants